

Amendments to the Specification:

Please replace the paragraph beginning at page 2, line 9, with the following:

--In one aspect, the present invention provides recombinant nucleic acid molecules that encode a fusion polypeptide, the recombinant nucleic acid molecules comprising a Ra12 polynucleotide sequence and a heterologous polynucleotide sequence, wherein the Ra12 polynucleotide sequence hybridizes to SEQ ID NO:3 under stringent conditions. In one embodiment, the recombinant nucleic acid molecules comprise a Ra12 polynucleotide sequence which is located 5' to a heterologous polynucleotide sequence. In another embodiment, the recombinant nucleic acid molecules further comprise a polynucleotide sequence that encodes a linker peptide between the Ra12 polynucleotide sequence and the heterologous polynucleotide sequence, wherein the linker peptide may comprise a cleavage site. In yet another embodiment, the recombinant nucleic acid molecules encode fusion polypeptides which further comprise an affinity tag. In yet another embodiment, the recombinant nucleic acid molecules encode a fusion polypeptide comprising a DPPD, a WT1, a gammaglobin, or a H9-32A heterologous polypeptide. In yet another embodiment, the recombinant nucleic acid molecules comprise a Ra12 polynucleotide sequence comprising at least about 30 nucleotides, at least about 60 nucleotides, or at least about 100 nucleotides. In yet another embodiment, the recombinant nucleic acid molecules comprise a Ra12 polynucleotide sequence as shown in SEQ ID NO:3. In yet another embodiment, the recombinant nucleic acid molecules comprise a Ra12 polynucleotide sequence that encodes a Ra12 polypeptide as shown in ~~SEQ ID NO:4, SEQ ID NO:17 or SEQ ID NO:18~~ SEQ ID NO:4, SEQ ID NO:17, SEQ ID NO:18 or SEQ ID NO:23--

Please replace the paragraph beginning at page 3, line 1, with the following:

--In yet another aspect, the present invention provides fusion polypeptides comprising a Ra12 polypeptide and a heterologous polypeptide, wherein the Ra12 polypeptide is encoded by a Ra12 polynucleotide sequence that hybridizes to SEQ ID NO:3 under stringent hybridization conditions. In one embodiment, the Ra12 polypeptide comprises at least about 10 amino acids, at least about 30 amino acids, or at least about 100 amino acids. In another embodiment, the Ra12 polypeptide has a sequence as shown in ~~SEQ ID NO:4, SEQ ID NO:17, or SEQ ID NO:18~~ SEQ ID NO:4, SEQ ID NO:17, SEQ ID NO:18 or SEQ ID NO:23.--

Please replace the paragraph beginning at page 4, line 29, with the following:

--Surprisingly, it was discovered by the present inventors that a 14 KD C-terminal fragment of the MTB32A coding sequence expresses at high levels on its own and remains as a soluble protein throughout the purification process. This 14 KD C-terminal fragment of the MTB32A is referred herein as Ra12 (having amino acid residues 192 to 323 of MTB32A). The nucleic acid and amino acid sequences of native Ra12 are shown, *e.g.*, in Figures 2-6. As described in detail below, the term "Ra12 polypeptide" or "Ra12 polynucleotide" as used herein refer to the native Ra12 sequences (*e.g.*, SEQ ID NO:3 or SEQ ID NO:4), their variants, or fragments thereof (*e.g.*, ~~SEQ ID NO:17 or SEQ ID NO:18~~ SEQ ID NO:17, SEQ ID NO:18 or SEQ ID NO:23). The present invention utilizes these properties of Ra12 polypeptides and provides recombinant nucleic acid molecules, expression vectors, host cells, and methods for stable and high yield expression of fusion polypeptides comprising a Ra12 polypeptide and a heterologous polypeptide of interest. The materials and methods of the present invention are particularly useful in expressing certain heterologous polypeptides (*e.g.*, DPPD) that other conventional expression methods failed to express in any substantial quantity.--

Please replace the paragraph beginning at page 15, line 32, with the following:

--In one embodiment, the Ra12 polypeptide sequence is as shown in SEQ ID NO:4. In another embodiments, the Ra12 polypeptide sequence comprises a portion of SEQ ID NO:4. For instance, an Ra12 polypeptide comprising 30 amino acids (e.g., amino acids 1-30 of SEQ ID NO:4; SEQ ID NO:17) or an Ra12 polypeptide comprising 128 amino acids (e.g., 128 amino acids of SEQ ID NO:4; SEQ ID NO:18 or SEQ ID NO:23) can be used as a fusion partner. *See Examples 2 and 3 below.*--

Please replace the paragraph beginning at page 16, line 27, with the following:

--Thus, the terms such as "Ra12 polypeptide" or "Ra12 polypeptide sequence" as used herein refer to native Ra12 polynucleotide sequences (e.g., SEQ ID NO:4), fragments thereof (e.g., ~~SEQ ID NO:17 or 18~~ SEQ ID NO:17, SEQ ID NO:18 or SEQ ID NO:23), or any variants thereof. Functionally, a Ra12 polypeptide has the ability to produce a fusion protein, and its ability to produce a fusion proteins in host cells may be enhanced or unchanged, relative to the native Ra12 polypeptide (e.g., SEQ ID NO:4), or may be diminished by less than 50%, and preferably less than 20%, relative to the native Ra12 polypeptide.--

Please cancel the present "SEQUENCE LISTING", pages 1-21, submitted February 26, 2002, and insert therefor the accompanying paper copy of the Substitute Sequence Listing, page numbers 1 to 21, at the end of the application.